Amendments to the Specification:

Please replace the paragraph on page 1 starting at line 3 and ending at line 11 with the following amended paragraph:

This application is a continuation of U.S. application serial no. 09/895,040, filed June 29, 2001, which is a continuation-in-part of U.S. application serial no. 09/864,761, filed May 23, 2001, and which is also a continuation-in-part of ~~also claims priority under 35 U.S.C. § 365(c) to~~ international patent application nos. PCT/US01/00663, PCT/US01/00664, PCT/US01/00665, PCT/US01/00666, PCT/US01/00667, PCT/US01/00668, PCT/US01/00669, PCT/US01/00670, all filed January 30, 2001, the disclosures of all of which are incorporated herein by reference in their entireties.

Please replace the paragraph beginning at line 28 on page 18 and continuing to line 8 on page 19 with the following amended paragraph:

Accordingly, four overlapping cDNA clones that together can be used to provide an assembled consensus sequence spanning the GRBP-2 cDNA were deposited in a public repository (American Type Culture Collection, Manassas, Virginia, USA) on June 27, 2001 and collectively been assigned accession no. PTA-3484[[_____]]. Clone 1 (designation grbp2-5r1) contains nucleotides 1 - 742 (numbering as in FIG. 3), clone 2 (designation grbp2-rt1) contains nucleotides 419 - 1360, clone 3 (grbp2-3f13) contains nucleotides 724 - 2748, and clone 4

(grbp2-rt5) contains nucleotides 1314 - 3489, plus the poly-A tail. Any errors in sequence reported herein can be determined and corrected by sequencing nucleic acids propagated from the deposited clones using standard techniques.

Please replace the paragraph on page 20 starting at line 3 and ending at line 10 with the following amended paragraph:

For purposes herein, percent identity of two nucleic acid sequences is determined using the procedure of Tatiana *et al.*, "Blast 2 sequences - a new tool for comparing protein and nucleotide sequences", FEMS Microbiol Lett. 174:247-250 (1999), which procedure is effectuated by the computer program BLAST 2 SEQUENCES, available online at the National Center for Biotechnology Information (NCBI) website. ~~http://www.ncbi.nlm.nih.gov/blast/bl2seq/bl2.html.~~

Please replace the paragraph on page 53 starting at line 10 and ending at line 20 with the following amended paragraph:

In a first such embodiment, the invention provides an isolated nucleic acid comprising (i) the assembled consensus nucleotide sequence of the four overlapping cDNAs deposited at the ATCC on June 27, 2001 and collectively accorded accession no. PTA-3484[[_____]], (ii) the nucleotide sequence of SEQ ID NO: 1, or (iii) the complement of (i) or (ii). The assembled consensus nucleotide sequence of the four overlapping

nucleic acids of the ATCC deposit has, and SEQ ID NO: 1 presents, the entire cDNA of human GRBP2, including the 5' untranslated (UT) region and 3' UT.

Please replace the paragraph on page 78 starting at line 6 and ending at line 14 with the following amended paragraph:

Bacterial cells can be rendered electrocompetent — that is, competent to take up exogenous DNA by electroporation — by various pre-pulse treatments; vectors are introduced by electroporation followed by subsequent outgrowth in selected media. An extensive series of protocols is provided online in Electroprotocols Online: Collection of Protocols for Gene Transfer (Bulletin #1029735, BioRad, Richmond, CA, USA) ~~(http://www.bio-rad.com/LifeScience/pdf/New_Gene_Pulser.pdf)~~.

Please replace the paragraph beginning at line 20 on page 79 and continuing to line 2 on page 80 with the following amended paragraph:

For chemical transfection, DNA can be coprecipitated with CaPO4 or introduced using liposomal and nonliposomal lipid-based agents. Commercial kits are available for CaPO4 transfection (CalPhos™ Mammalian Transfection Kit, Clontech Laboratories, Palo Alto, CA, USA), and lipid-mediated transfection can be practiced using commercial reagents, such as LIPOFECTAMINE™ 2000, LIPOFECTAMINE™ Reagent, CELLFECTIN®

Reagent, and LIPOFECTIN® Reagent (Invitrogen, Carlsbad, CA, USA), DOTAP Liposomal Transfection Reagent, FuGENE 6, X-tremeGENE Q2, DOSPER, (Roche Molecular Biochemicals, Indianapolis, IN USA), Effectene™, PolyFect®, Superfect® (Qiagen, Inc., Valencia, CA, USA). Protocols for electroporating mammalian cells can be found online in Electroprotocols Online: Collection of Protocols for Gene Transfer (Bulletin #1029735, Bio-Rad, Richmond, CA, USA) ~~(http://www.bio-rad.com/LifeScience/pdf/New_Gene_Pulser.pdf)~~.

Please replace the paragraph on page 81 starting at line 23 and ending at line 32 with the following amended paragraph:

For purposes herein, percent identity of two amino acid sequences is determined using the procedure of Tatiana *et al.*, "Blast 2 sequences - a new tool for comparing protein and nucleotide sequences", FEMS Microbiol Lett. 174:247-250 (1999), which procedure is effectuated by the computer program BLAST 2 SEQUENCES, available online at the National Center for Biotechnology Information (NCBI) website. ~~http://www.ncbi.nlm.nih.gov/blast/bl2seq/bl2.html,~~

Please replace the paragraph starting at line 27 on page 102 and ending at line 6 on page 103 with the following amended paragraph:

In a first series of protein embodiments, the invention provides an isolated human GRBP2 polypeptide having

an amino acid sequence encoded by the assembled consensus nucleotide sequence of the four overlapping cDNAs deposited at the ATCC on June 27, 2001 and collectively accorded accession no. PTA-3484[[_____]], or the amino acid sequence in SEQ ID NO: 3, which are full length human GRBP2 proteins. When used as immunogens, the full length proteins of the present invention can be used, inter alia, to elicit antibodies that bind to a variety of epitopes of the several forms of human GRBP2 protein.

Please replace the paragraph starting on page 119 at line 10 and ending at line 18 with the following amended:

In a first series of antibody embodiments, the invention provides antibodies, both polyclonal and monoclonal, and fragments and derivatives thereof, that bind specifically to a polypeptide having an amino acid sequence encoded by the assembled consensus of the four cDNAs deposited in the ATCC on June 27, 2001 and collectively accorded accession no. PTA-3484[[_____]], or that have the amino acid sequence in SEQ ID NO:3, which are full length human GRBP2 proteins.

Please replace the paragraph starting on page 129 at line 13 and ending at line 16 with the following amended paragraph:

The human GRBP2 cDNA was deposited at the American Type Culture Collection (ATCC) on June 27, 2001 as four

overlapping cDNA fragments collectively accorded accession number PTA-3484[[_____]].

Please replace the paragraph starting at line 30 on page 131 and continuing to line 2 on page 132 with the following amended paragraph:

Motif searches using Pfam (Washington University, St. Louis, web site ~~http://pfam.wustl.edu~~), SMART (European Molecular Biology Laboratory, Heidelberg, web site ~~http://smart.embl-heidelberg.de~~), and PROSITE pattern and profile databases (Expert Protein Analysis System (ExPASy) web site ~~http://www.expasy.ch/prosite~~), identified several known domains shared with mouse Grbp1 and Grbp2.

Please replace the paragraph starting at line 32 on page 132 and continuing to line 4 on page 133 with the following amended paragraph:

Transcription factor binding sites were identified using MOTIF, available at the GenomeNet web site (Bioinformatics Center, Institute for Chemical Research, Kyoto University) ~~a web based program (http://motif.genome.ad.jp/)~~, including a binding site for MZF1 (917-924 and 927-934 bp), for cap (cap signal for transcription initiation, 969-976 and 983-990 bp), for SP1 (836-845, 915-924, and 937-946 bp, with numbering according to SEQ ID NO: 38), amongst others.